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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/073,573 06/08/93 BASSETT

C5M1/0711

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J  
EXAMINER

WARNICK IV, S

ART UNIT

PAPER NUMBER

3501

DATE MAILED:

07/11/94

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- ☒ Notice of References Cited by Examiner, PTO-892.
- ☒ Notice re Patent Drawing, PTO-948.
- ☐ Notice of Art Cited by Applicant, PTO-1449.
- ☐ Notice of Informal Patent Application, Form PTO-152.
- ☐ Information on How to Effect Drawing Changes, PTO-1474.
- ☐ \_\_\_\_\_

Part II SUMMARY OF ACTION

1. ☒ Claims 1-25 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2. ☐ Claims \_\_\_\_\_ have been cancelled.

3. ☐ Claims \_\_\_\_\_ are allowed.

4. ☒ Claims 1-25 are rejected.

5. ☐ Claims \_\_\_\_\_ are objected to.

6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed on \_\_\_\_\_, has been ☐ approved. ☐ disapproved (see explanation).

12. ☐ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION

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**Part III DETAILED ACTION**

**Informalities:**

The disclosure is objected to because of the following informalities: claim 9, line 3, "mount" should be -- mounts --. ✓  
Appropriate correction is required.

**35 U.S.C. 112 Objection(s)/Rejection(s):**

Claims 3, 4, 6-11, 17-24 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, reciting that the coulter is a wheel is redundant and not further limiting. ✓

Claims 6 and 8 are confusing. What does the applicant mean by "traces a path in rotation that coincides with the first means . . . ." Furthermore, in claim 6, "a second wheel" is indefinite because there is no first wheel recited.

Claim 9 is indefinite because the second and third wheel's axes are transverse to each other but they are incapable of being transverse to the axis of the first wheel.

Claim 16, line 6, "the intended line" lacks proper antecedent basis. /

Claim 17, 19 and 20, there is not "third means" recited to substantiate a third, fourth and fifth means.

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Claim 21, lines 14-15, "at least equal to" is indefinite because it is unclear the depth can be greater than or less than equal (see claim 22 also). Line 7 it is unclear how the axes are transverse. It is recommended to recite that they are transverse to each other.

**Prior Art Rejection(s):**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-8, 12-14 and 16-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Peterson et al. 4,377,979.

Peterson et al. disclose a planter comprising: a frame 13; a first means 28 on the frame for penetrating the soil to create an opening for at least one of seed and fertilizer; and second means 29 on the frame for at least partially downstream of the first means for loosening soil. The loosened bed is defined for receipt of seed or fertilizer. Furthermore, Peterson et al. disclose a first means which is a coulter wheel; the first, second and third wheels all rotate about a horizontal axis; the second wheel traces a path in rotation that coincides with the first means (as best understood); and the frame comprises a main

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part 12 and subpart 34, 35, 45, etc. for vertical movement and vertical adjustment of the wheels. The first and second wheels produce a V-shape opening away from the direction of travel. A fourth means 86 is provided for defining an open slot for receipt of the seed or fertilizer. All of the wheels appear to penetrate the soil at the same depth. Fifth means 89 is provided for closing the furrow.

Peterson et al. disclose all of the structure of claims 1-3, 5-8, 12-14 and 16-20.

Claims 1-3, 5-8, 12-14, 16-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by David et al. 4,550,122.

David et al. disclose a device very similar to that of Peterson et al. No further explanation is deemed necessary. The fourth-sixth means are considered inherent in the planter to which the special opener of David et al. is connected. Almost all planters have an opener, delivery means and closer.

Claims 21-23 are rejected under 35 U.S.C. § 102(b) as being anticipated by Martin 4,785,890.

Martin discloses a planter which comprises: a frame 13; first and second cooperating toothed wheels 54; means for mounting the wheels so they rotate in vertically extending planes about transverse axes and form a V-shaped opening (inherent in device); means for supporting the frame at a predetermined height 22, 23, etc.; and means on the frame for defining a slot 32 at a

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first depth. The wheels penetrate the soil to a depth equal to the soil opener in fig. 8.

Martin discloses all of the structure of claims 20-23.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 4 and 25 are rejected under 35 U.S.C. § 103 as being unpatentable over Peterson et al. in view of Hohl 4,407,371.

Peterson et al. does not use a rippled coulter.

Hohl teaches the use of rippled coulters with a planter.

To one with ordinary skill in the art it would have been obvious to provide Peterson et al. with a rippled coulter to assure penetration of the soil and trash.

With respect to the method claim: one with ordinary skill in the art would have found the method claimed obvious from the operation of Peterson et al.

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Claims 9-11 and 15 are rejected under 35 U.S.C. § 103 as being unpatentable over Peterson et al. in view of Martin.

Peterson's wheels are not toothed wheels.

Martin discloses a pair of toothed wheel openers 54 for in front of a planter.

To one with ordinary skill in the art it would have been obvious to provide the wheels in Peterson et al. as toothed wheels, as taught by Martin, to aid in cutting and removing trash from in front of the planter. The other structure of claims 10 and 11 is present in Peterson et al. With respect to the height adjustability of the front coulter of claim 15, the examiner takes official notice that the use of height adjustable coulters is old and well known in the art and would have been obvious to one with ordinary skill in that art to add to Peterson.

Claim 24 is rejected under 35 U.S.C. § 103 as being unpatentable over Martin in view of Bassett et al. 5,129,282.

Bassett et al. disclose a toothed wheel pair for addition to a planter which provides height adjustability.

To one with ordinary skill in the art it would have been obvious to provide the device of Martin with height adjustability, as taught by Bassett et al., for precision furrow opening.

**Remarks:**

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The rejections stated herein constitute a first rejection under 37 C.F.R. 1.104. This application will be reconsidered upon the filing of a response complying with the requirements of 37 C.F.R 1.111.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Spencer K. Warnick whose telephone number is (703) 308-3409. The examiner can normally be reached on Monday-Thursday from 7:30 AM-5:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randolph A. Reese, can be reached at (703) 308-2121. The fax number for this Group is (703) 308-3597 or 3598.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-2168.

SW  
June 24, 1994

*SW*

  
RANDOLPH A. REESE  
SUPERVISORY PATENT EXAMINER  
ART UNIT 351